**Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application.

Please amend claims 58-63, 65, and 71 without acquiescence or prejudice.

**Listing of Claims**

1. - 57. (Cancelled)

58. (Currently Amended) An assay device for determining the presence of cancer or a propensity to develop cancer in an animal, said device comprising an array of immunoglobulin molecules, or derivatives thereof, immobilized to discrete regions on a solid support, wherein each discrete region comprises an immunoglobulin or derivative thereof specific for a different cell surface antigen on the same cell, and ~~wherein, with the exception of a negative control,~~when ~~each~~ the immunoglobulin ~~molecule~~ molecules ~~is capable of interacting~~interact with a biological sample comprising a cell expressing the respective cell surface antigen, ~~and wherein interactions between the immunoglobulin molecules and their respective cell surface antigens establishes concurrently a discriminatory image of antigen expressiona~~ pattern of the immobilized immunoglobulins to their respective antigens provides a differential pattern of density which is indicative of the presence of cancer or a propensity to develop cancer, wherein said cancer is selected from the group consisting of leukemia, fibrosarcoma, myxosarcoma, Ewing's sarcoma, granulocytic leukemia, basal cell carcinoma, colon cancer, gastric cancer, and skin cancer.

59. (Currently Amended) An assay device for determining the presence of cancer or a propensity to develop cancer in an animal, said device comprising an array of immunoglobulin molecules, or derivatives thereof, immobilized to discrete regions on a solid support, wherein each discrete region comprises an immunoglobulin or derivative thereof specific for a different cell surface antigen on the same cell, and ~~wherein, with the exception of a~~

~~negative control,~~ when ~~each~~ the immunoglobulin ~~molecule~~ molecules ~~is capable of interacting~~interact with a biological sample comprising a cell expressing the respective cell surface antigen, a pattern of the immobilized immunoglobulins to their respective antigens provides a differential pattern of density which is ~~and wherein interactions between the immunoglobulin molecules and their respective cell surface antigens establishes concurrently a discriminatory image of antigen expression~~ indicative of the presence of cancer or a propensity to develop cancer, wherein said cancer is leukemia.

60. (Currently Amended) The assay device according to claim 59 wherein leukemia is selected from the group consisting of chronic myeloid leukemia (CML); acute myelomonocytic leukemia (AMML); acute lymphocytic leukemia (ALL); acute erythrocytic leukemia (AEL); acute megakaryocytic leukemia (AMegL); acute monocytic leukemia (AMoL); acute myeloid leukemia (AML); non-Hodgkin's lymphoma (NHL); ~~acute promyelocytic leukemia (APL);~~ chronic lymphocytic leukemia (CLL); hairy cell leukemia (HCL); and acute promyelocytic leukemia (APL).

61. (Currently Amended) The assay device of any one of ~~claim~~ claims 58-60, wherein the cell surface antigen is selected from the group consisting of a cluster of differentiation (CD) antigen; a myeloid (MY) antigen; and a lymphoid (LY) antigen expressed on leukemic cells.

62. (Currently Amended) An assay device for determining the presence of a disease or disorder of the immune system in an animal, said device comprising an array of immunoglobulin molecules, or derivatives thereof, immobilized to discrete regions on a solid support, wherein each discrete region comprises an immunoglobulin or derivative thereof specific for a different cell surface antigen on the same cell, and ~~wherein, with the exception of a negative control, each~~when the immunoglobulin ~~molecule is capable of interacting~~ molecules interact with a biological sample comprising a cell expressing the respective cell surface antigen, ~~and wherein interactions between the immunoglobulin molecules and their respective cell~~

~~surface antigens establishes concurrently a discriminatory image of antigen expression~~ a pattern of the immobilized immunoglobulins to their respective antigens provides a differential pattern of density which is indicative of the presence of disease or disorder of the immune system, wherein the disease or disorder of the immune system is selected from the group consisting of an autoimmune disease, infection by a pathogen, congenital immunodeficiency, adverse reaction following bone marrow or tissue transplantation, and chronic fatigue syndrome.

63. (Currently Amended) An assay device for determining the presence of a disease or disorder of the immune system in an animal, said device comprising an array of immunoglobulin molecules, or derivatives thereof, immobilized to discrete regions on a solid support, wherein each discrete region comprises an immunoglobulin or derivative thereof specific for a different cell surface antigen on the same cell, and when ~~wherein, with the exception of a negative control, each~~the immunoglobulin ~~molecule is capable of interacting~~ molecules interact with a biological sample comprising a cell expressing the respective cell surface antigen, a pattern of the immobilized immunoglobulins to their respective antigens provides a differential pattern of density which is ~~and wherein interactions between the immunoglobulin molecules and their respective cell surface antigens establishes concurrently a discriminatory image of antigen expression~~ indicative of the presence of disease or disorder of the immune system, wherein the disease or disorder of the immune system is an autoimmune disease.

64. (Previously Presented) The assay device according to claim 63 wherein the autoimmune disease is selected from the group consisting of Type 1 diabetes, multiple sclerosis, myasthenia gravis, pernicious anemia, psoriasis, rheumatoid arthritis, scleroderma, and systemic lupus erythematosis.

65. (Currently Amended) An assay device for determining the presence of a disease or disorder of the immune system in an animal, said device comprising an array of immunoglobulin molecules, or derivatives thereof, immobilized to discrete regions on a solid

support, wherein each discrete region comprises an immunoglobulin or derivative thereof specific for a different cell surface antigen on the same cell, and when ~~wherein, with the exception of a negative control, each~~the immunoglobulin ~~molecule is capable of interacting~~ molecules interact with a biological sample comprising a cell expressing the respective cell surface antigen, a pattern of the immobilized immunoglobulins to their respective antigens provides a differential pattern of density which is ~~and wherein interactions between the immunoglobulin molecules and their respective cell surface antigens establishes concurrently a discriminatory image of antigen expression~~ indicative of the presence of disease or disorder of the immune system, wherein the disease or disorder of the immune system is an infection by a pathogen.

66. (Previously Presented) The assay device of claim 65, wherein the pathogen is selected from the group consisting of a virus, a bacterium, a protozoan, and a fungus.

67. (Previously Presented) The assay device of claim 66, wherein the virus is selected from the group consisting of HIV-1, Hepatitis virus, and Esptein-Barr virus.

68. (Previously Presented) The assay device of claim 66, wherein the protozoan is a malaria parasite.

69. (Previously Presented) The assay device of any one of claims 58, 59, 62, 63, and 65 wherein the animal is a human or non-human animal.

70. (Previously Presented) The assay device of any one of claims 58, 59, 62, 63, and 65, wherein the interaction of the cell surface antigen with an immobilized immunoglobulin is determined using a labeled antibody specific for the same cell surface antigen or specific for a different cell surface antigen associated with said first cell surface antigen.

71. (Currently Amended) The assay device of any one of claims 58, 59, 62, 63, and 65, wherein the immunoglobulins or derivatives thereof are bound covalently to the ~~array~~

solid support ~~covalently~~ or wherein the immunoglobulins or derivatives thereof are bound to a recombinant, truncated protein G that is first coated on the solid support.